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Florida Department of Transportation

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THOMAS F. BARRY, JR.
SECRETARY

December 13, 2001

U.S. Department of Transportation
Dockets Management Facility
Room PL-401
400 Seventh Street, SW
Washington, DC 20590

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Re: FHWA Docket No. FHWA-2001-8954 and FHWA Docket No. FHWA-2001-9182
Advanced Notice of Proposed Rulemaking: Request for Comments

Dear Sir or Madam:

Enclosed are the Florida Department of Transportation comments for the subject proposed rules.

Sincerely:

Richard L. Kwan
For

Frank Day, P.E.
Engineer of Structure Operations

FD/rik
Cc: Freddie Simmons, P.E. (w/attachment)
Attachment
SCN: 372 (160)

CBIAPREC.WPT

Florida Department of Transportation Comments
On Proposed Regulation Revision
December 13, 2001

FHWA Docket No. FHWA-2001-8954

Revisions to 23 CFR Part 650 "National Bridge Inspection Standards":

Application of Standards

Question: Should the FHWA develop its own definition of a bridge for the purpose of inspection and reporting?
Answer: No the current definition is adequate.

Question: Should the FHWA definition change the way the bridge length is determined or what the minimum bridge length should be for reporting purposes?
Answer: The minimum bridge length should remain at 20 feet, however the way the length is determined should change to agree with the way bridge length is reported in "Recording and Coding Guide for the Structure Inventory and Appraisal of the Nation's Bridges".

Question: What impact will the possible inclusion of more bridges be (1) on public authorities complying with this as an NBIS requirement, (2) or on the FHWA which maintains the inventory, (3) or on the HBRRP funds.
Answer: The impact on all of these should be minimal, since the increase in the number of bridges should be minimal.

Inspection Procedures

Question: What impact will changing the underwater inspection intervals have on public authorities complying with this as an NBIS requirement?
Answer: The impact in Florida would be minimal since Florida conducts underwater bridge inspection more frequently than required by the National Bridge Inspection Standards.

Question: Should the FHWA consider providing guidance within the regulations to address this? (Guidance on Scour – FHWA Technical Advisory)
Answer: The FHWA should not duplicate the scour technical advisory within the regulation.

Question: Should the FHWA provide guidance for what public authorities should do after major storms?
Answer: This guidance does not belong in the regulations. The bridge owner is the best qualified to determine the proper strategy to follow after major storms.

Question: What, if any, would be the impact on public authorities complying with evaluation of scour at bridges criteria within the NBIS regulation?

Answer: If the regulations are too detailed referring to scour, then the bridge owner may be unduly restricted from properly managing their inventory.

Frequency of Inspections

Question: Should the 4-year interval be increased so that more bridges would be eligible for the extended inspection frequency?
Answer: Florida's statutes require a 2 year inspection frequency, therefore Florida sees no benefit in extending the inspection frequency.

Question: What would be a reasonable interval?
Answer: Since Florida is required by statutes to inspect bridges every 2 years, Florida believes a 2 year frequency is reasonable. If the 2 year cycle is strictly enforced, bridge inspections tend to move forward in time, therefore allowing a grace period of 30 days on inspections may be beneficial.

Question: What impact would this have on the safety of bridges?
Answer: Increasing the inspection interval increases the possibility that an unsafe condition might occur, which could result in harm to the public.

Qualification of Personnel:

Question: Should the individual who is in charge of the inspection and reporting who is a PE be required to have the same training as bridge inspectors and have additional experience in bridge inspection?
Answer: The person in charge of the unit responsible for inspection and reporting should be a PE, and be required to take a comprehensive class in bridge inspection. Requiring additional bridge inspection experience may create a hardship for public authorities, who believe it is beneficial to rotate individuals into different positions to give them as broad an experience base as possible.

Question: Should the FHWA require that bridge inspections be performed by either a civil or structural engineer who is also a licensed professional engineer?
Answer: No, most routine bridge inspections do not require the expertise of a professional engineer, to do so would needlessly increase costs without an increase in quality. Each bridge owner should determine the needed expertise for the bridges in its inventory.

Question: Should the NBIS regulation be more specific as to the discipline of the professional engineer responsible for these bridge inspections and what impact would this change have on public authorities complying with this?
Answer: The NBIS should simply reinforce the standard that professional engineers only practice engineering in the fields in which they are experienced and qualified, therefore adding requirements to the NBIS would be redundant. In addition, some professional engineers who don't have degrees in civil and/or structural engineering have gained

experience in bridge inspection, and thus are quite capable of performing bridge inspections. Changing the requirements may create difficulty for public authorities in filling these positions.

Question: The FHWA is considering requiring certification training in proportion to the complexity of the bridge structure being inspected, and making this a part of a requirement for inspectors under the national bridge inspection program. What impact would this change have on public authorities complying with this as an NBIS requirement?
Answer: Such a program would be extremely difficult to administer. The Department prefers that it be the responsibility of the person in charge of inspection and reporting to assign inspectors with the knowledge, skills, abilities and experience comparable to the complexity of the structure being inspected.

Question: Should those performing underwater inspections be qualified licensed professional engineers?
Answer: No, the team leader for the underwater inspection should have the same qualifications as a team leader for an above water inspection, or such an individual should be present at the site during the underwater inspection.

Question: What impact would requiring the underwater inspector to be a professional engineer have on public authorities complying with this?
Answer: It would increase the cost of bridge inspections. Florida has not encountered problems in underwater inspections that would be solved by having a professional engineer perform the inspection. The public authority should decide the qualifications of the underwater team leader based on the complexity of the structure.

Additional comments on Qualification of personnel:

The current requirements for a bridge inspector who is not a professional engineer, is for the completion of a comprehensive course in bridge inspection, and 5 years of bridge inspection experience. Allow the states to substitute completion of the comprehensive course, an experience level set by the state and successful completion of a field inspection and report reviewed by the state. Some individuals learn quicker than others. We have inspectors who are capable of leading an inspection after a year of experience, and others who wouldn't be capable after 5 or 10 years. This change would improve the quality of our team leaders by allowing us to retain the really good individuals, who often leave inspection before they obtain their 5 years experience.

Inspection Report

Question: What if any would the impact be on public authorities complying with only allowing the inspector who was out in the field to change the inspection report as an NBIS requirement?

Answer: In Florida the inspector creates the report, and the individual in charge of inspection and reporting reviews the report, and if necessary returns it to the inspector for correction. After the report is finalized the inspector initials the report and the reviewing professional engineer signs the report. As long as the change does not prohibit this process, then their will be no effect on Florida.

Inventory

Question: Should the reporting requirements for the NBIS be changed and what, if any, would the impact be on public authorities complying with this?

Answer: Florida proposes 2 changes.

- Federal agencies report their bridge data directly to the FHWA, which then sends a copy of the data to the states. The federal bridge data is not included in the annual submission of data to the FHWA. Therefore, the states should be relieved of the requirement to maintain data on federal agency bridges, since the states have no control of the quality or accuracy of the data.
- A clarification should be made that the load rating for a new or reconstructed bridge be performed within 90 days of completion of construction for bridges under state jurisdiction and 180 days of completion of construction for all other bridges.

Revisions to 23 CFR Part 650 "Highway Bridge Replacement and Rehabilitation Program"

Question 1: A bridge is eligible for HBRRP funding if it is undergoing major reconstruction as defined under Section 650.405. Is the current definition for major reconstruction adequate? If not, how should it be modified?
Answer: Change the definition to allow an exception for rehabilitation of a major bridge element if the resulting bridge will not be deficient (structurally deficient or functionally obsolete).

Question 2: Should the definition of what constitutes rehabilitation be expanded?
Answer: Expand the definition of rehabilitation to include, painting of steel structures, countermeasures for scour critical bridges, installing cathodic protection and seismic retrofits.

Question 3: The HBRRP is intended to provide funds for upgrading the Nation's bridges to provide for increasingly safe structures for the traveling public. What flexibility should be provided in this program in order to reach this goal?
Answer: It is possible that replacing or reconstructing a bridge that is not deficient (structurally deficient or functionally obsolete) but is still an unsafe structure would have a higher cost benefit ratio than deficient bridges. However, this type of project would not be eligible for funding with the HBRRP. Therefore, the HBRRP should fund any bridge replacement or reconstruction selected by a state's bridge management system.

Question 4: Should there be consistency nationwide on the appropriate standard(s) to be followed on all bridges that are insensitive to highway classification?
Answer: The highway classification should continue to control the standards used. AASHTO standards should continue to be the minimum standards for bridges on the National Highway System. For bridges off of the National Highway System the states should set the standards. This will allow the states to set the standards compatible with the roadway being served.

Question 5: Should the definition of a major reconstruction project include some or all of these types of projects? (Safety feature replacement or upgrading; overlay of bridge deck if part of a larger highway-surfacing project; utility work; emergency repair to restore structural integrity to the previous status following an accident; retrofitting to correct a deficiency, which does not substantially alter physical geometry or increase the load carrying capacity; work performed to keep abridge operational while plans for complete rehabilitation or replacement are under preparation; cost of long approach fills, causeways, connecting roadways, etc.)
Answer: Florida's needs are being met by the current policy using HBRRP funds for eligible projects (replacements and major reconstructions) and state funds for other projects.

Should these type of projects be eligible for HBRRP funds?
Answer: No, Florida believes that the current rules are appropriate.

Question 6: There is no question 6.

Question 7: FHWA uses the sufficiency rating as a basis for establishing eligibility and priority for HBRRP funding. Through this process a list of eligible bridges is established. The States then may choose any bridge project on this list for replacement or rehabilitation. Should this process be changed? If so, what method would be most effective in eliminating deficient bridges?
Answer: Allow states to use a portion (say 10-20%) of HBRRP funds for bridge replacement or reconstruction for bridges not on the eligibility list that are selected by the state's bridge management system. There are instances of high traffic bridges that are not quite narrow enough to qualify as functionally obsolete, but due to the volume of traffic the benefit of widening these structures is much greater than widening structures that are actually functionally obsolete. This would allow better allocation of resources.

Question 8: The apportionment factors are based on bridge construction unit costs sent annually by the states to the FHWA. The FHWA uses 3-year averages of these costs as replacement costs. The FHWA is seeking comments on this process and on improving the accuracy of the cost data received.
Answer: The current method of distributing federal bridge funds among the states is based on the deck area of deficient bridges in each year's appraisal and inventory report as well as an estimated cost to replace the deficient bridges' deck area. This current methodology penalizes those states that place emphasis and priority on replacing deficient bridges using other transportation program funds to supplement federal bridge funds that are available. States that place low emphasis and priority on preserving their existing bridges are likewise rewarded for not using other funds to sustain the bridge program. This is inconsistent with the purpose of having a separately funded federal bridge replacement and rehabilitation program.

Florida proposes distribution to the states should be based on the total deck area of all bridges in each state, not just those deficient. This revision would place the federal bridge funds where needed, in direct proportion to where bridges are located.

Question 9: Section 650.411 sets procedures for bridge replacement and rehabilitation projects for submission and approval. Should this be modified? If so, how?
Answer: No.

Additional comment:
The federal bridge discretionary program is funded at $100 million each year, further constrained by limited availability of obligating authority each year. Since this amount is so small relative to documented needs, and since the distribution has become a matter of selection by committee bill, we propose to eliminate this subprogram and allow all bridge funds to be distributed to the states in accordance with applicable rules.